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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,904	11/18/2003	Show-Nan Chung	CHUN 3064/EM	3981

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,904

Applicant(s)

CHUNG ET AL.

Examiner

Kimnhung Nguyen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The claims 1-9 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfe et al. (US 6,037,930).

As to claim 1, Wolfe et al. discloses in figs. 2, 3, a reading control device (circuit 3, see col. 6, lines 3-8) for a four-line resistive touch panel including first and second conducting plates (x+, Y+, fig. 3) wherein the reading control device is electrically energized to alternately apply voltage to both the first and second conducting plates so that a discharge is performed on the conducting plate not being electrically energized and an activation voltage is next read from the discharged conducting plate, thereby obtaining correct location data from the activation voltage (see col. 6, lines 45-55).

As to claim 3, Wolfe et al. discloses further, wherein the first conducting plate comprises two edges of X (+) and X (-) and the second conducting plate comprises two edges of Y (+) and Y (-) respectively.

Art Unit: 2629

As to claim 4, Wolfe et al. discloses further, comprising a bus including four lines each electrically coupled to one of the edges X (+), X (-), Y (+), and Y (-) (see interface connector of fig. 17B)

As to claim 5, Wolfe et al. discloses further, comprising a reading control circuit including two ground circuits (see grounds of fig. 17B) for an inherent discharging.

As to claim 6, Wolfe et al. discloses further, wherein the reading control circuit further includes a plurality of switch transistors (Q1, Q2, Q3, Q4, fig. 5), two of the switch transistors being operative to couple to the ground circuits (see Q3, Q4 connected to grounds, fig. 5) so

That each switch transistor associated with the ground circuit is adapted to switch between the discharge via the coupled ground circuit or the activation voltage reading.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfe et al. (US 6,037,930) in view of Chan (US 5,283,558).

Wolfe et al. discloses every feature of the claimed invention as discussed above, excluding comprising a resilient member made of dielectric insulating material between the first and second conducting plates. Chan discloses in fig. 1, a touch control by using a matrix of X and Y by using of dielectric layer such as plastic membrane or paper sheet with adhesive metal

Art Unit: 2629

strips between the two plates (see terminal resistances Rx16 and Ry17 or first and second plates, see col. 7, lines 12-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using dielectric layer such as plastic membrane or paper sheet with adhesive metal strips between the two plates as taught by Wolfe et al. into the control device four-line resistive touch panel of Wolfe et al. for producing the claimed invention because this would provide to the user the way of using insulating layers such as plastic membrane or paper sheet with adhesive metal strips or wires which leads to low-cost manufacturing (see col. 7, lines 31-33).

Allowable Subject Matter

5. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

None of the cited art teaches or suggests that wherein the voltage is alternately applied to each of the first and second conducting plates via the correspondence line of the bus so as to conduct the corresponding switch transistor for discharging the conducting plate not being electrically energized via the coupled ground circuit and read the activation voltage from the discharged conducting plate, thereby obtaining correct location data from the activation voltage as claims 7-9.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnhung Nguyen
September 28, 2006


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
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